

5 [treating] ~~massaging and/or tumbling~~ smaller pieces of meat  
326 F11 having a layer of proteins thereon with one or more edible salts  
[in order to form a layer with solubilized] such that the  
proteins on the surface of the smaller pieces of meat solubilize  
and ~~extrude~~ <sup>effuse</sup> from the salt treated pieces of meat and the  
10 proteins on the surface of the pieces of meat are activated;

D2 decreasing the pH of the layer with solubilized  
proteins by mixing an acidifying agent with the pieces of meat  
thereby selectively denaturing and coagulating the solubilized  
proteins such that the smaller pieces of meat are mutually joined  
15 but themselves substantially retain the properties of unprocessed  
raw meat because proteins present in the smaller pieces of meat  
substantially do not denature <sup>while</sup> ~~and~~

holding the pieces of meat against each other to form  
the coherent piece of meat.

#### REMARKS

The specification stands objected to for failure to  
provide antecedent basis for the subject matter recited in claim  
9. The specification has been amended at page 11 to include  
disclosure regarding the combination of methods that form a  
coherent piece of meat, namely, the use of acids and forcemeat  
in a single process. The specification, as amended, is believed  
to properly support the claims.

Claims 1, 3, 4, 7, 9-12, and 14-20 stand rejected under  
35 U.S.C. § 103(a) for obviousness over U.S. Patent No. 3,740,235  
to Weiner in view of an abstract of German Patent No. 1,692,110  
to Bauer et al. Claim 8 stands rejected under 35 U.S.C. § 103(a)  
for obviousness over the Weiner patent in view of the Bauer et

al. abstract and in further view of U.S. Patent No. 4,517,888 to Gould. In view of the amendment to claim 1 and for the following reasons, Applicant respectfully traverses these rejections.

Claim 1 has been amended to incorporate the subject matter of canceled claim 8, namely, that the smaller pieces of meat are massaged and/or tumbled with salts such that the proteins on the surface of the smaller pieces of meat solubilize and extrudate from the salt treated pieces of meat and the proteins on the surface of the pieces of meat are activated. Support for the amendment to claim 1 can be found at page 4, lines 19-26 and original claim 8.

The Examiner asserts that the addition of acids to sausage meat is a known step for preparing a food composition. Applicant recognizes that acid is used in the preparation of certain food compositions. For example, acids are added to meat products for providing heated meat with a desired pink color or to improve the taste or shelf life of meats. However, the present invention relies upon the use of acid in a unique manner, namely, to solubilize and activate proteins on the surface of the pieces of meat.

Although the Weiner patent teaches that the production of meat can incorporate other additives such as seasonings, it does not teach or suggest the use of acids. The combination of the teachings of the Bauer et al. abstract with the teachings of the Weiner patent is inappropriate for the following reasons.

The Bauer et al. abstract discloses a sausage emulsion to which an acid (or a salt thereof) is added. The emulsion is not stable and, as set forth in line 2 of the abstract, the emulsion must be heated. Sausage emulsions become coherent only after they are heated. There is nothing in the Bauer et al. abstract which teaches or suggests forming a solubilized layer of proteins around smaller pieces of meat by tumbling or massaging the meat particles followed by selective denaturation using an acid additive.

A copy of the Bauer et al. application was submitted in the Amendment of July 8, 1998 and considered by the Examiner in the Final Office Action. Accompanying this Amendment is a translation of the second page of the two available pages of the Bauer et al. application which includes the claims therein. A Verification of Translation for this page of the claims is also enclosed. The Verification of Translation indicates that the cover page and the claims of German Patent No. 1,692,110 were translated, but only the claims of German Patent No. 1,692,110 were actually translated. The cover page merely provides information on the filing and granting thereof; no disclosure is present on the cover page. If a revised Verification of Translation to correct this is required, the Examiner is requested to contact the undersigned.

The translation demonstrates that the method disclosed in the Bauer et al. application relates to production of frankfurter sausages utilizing an acid additive. Frankfurter sausages are emulsion sausages which only become coherent after heating. One skilled in the art would not look to the teaching

of the Bauer et al. application because acid is not added in the disclosed method to denature and coagulate proteins solubilized by salt. The Bauer et al. process of preparing emulsion sausages could not use a salt additive because the emulsified meat particles would release so much protein that the mixture would actually solidify prematurely. Hence, Bauer et al. does not suggest adding an acid to denature and coagulate salt-solubilized proteins since the acid addition therein is for a completely different purpose. In the absence of any desirability of adding salt to the emulsion sausage of the Bauer et al. application, there is no motivation to add acid for activating salt-solubilized proteins. One seeking to prepare a coherent piece of raw meat from smaller pieces of meat would not look to the Bauer et al. application to modify the teachings of the Weiner patent. Nowhere in either reference is there any consideration to activating salt-solubilized proteins as is required in amended claim 1. Although the Gould patent teaches kneading food in a rotary drum, it does not supplement the deficiencies of the combined teachings of the Weiner patent and the Bauer et al. application. Accordingly, the combination of the teachings of the Bauer et al. application is inappropriate with that of the Weiner patent with or without consideration of the Gould patent.

In addition to emulsion sausages, some sausages are prepared in a dry state. Dry sausages obtain their strength and keeping properties when dried. The drying step causes water to migrate to the outside of the meat particles. There is no motivation to add salt to drying sausages because the added salt would not result in the activation of protein but instead would

smear the fat therein. If salt were added to sausages being dried, water transport would be inhibited and the dry sausages would no longer be able to release the water and would ultimately decompose. Hence, the formation of salt-solubilized proteins at the surface of the pieces of meat (by tumbling or massaging the meat pieces with salt) would be unacceptable in producing dry sausage.

The critical aspects of the present invention as set forth in amended claim 1, including activation of salt-solubilized proteins with acid, are not present in any of the cited references. Accordingly, claim 1 and dependent claims 3, 4, 9-12, and 14-20 are believed to define over the prior art of record. Reconsideration of the obviousness rejections and allowance of claims 1, 3, 4, 9-12, and 14-20 are respectfully requested.

Respectfully submitted,

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